

Senate Bill 08-188
Pilot Program Implementation Committee
Research Plan: The Value of Nurse Involvement in Decision Making

Executive Summary

In 2007, Governor Bill Ritter empowered a task force to study nurse staffing issues and workforce retention in Colorado. The Task Force generated recommendations, one of which focused on the need for a research study to measure the impact of staff nurse involvement in decisions affecting the work environment. Senate Bill 08-188 empowered and funded such a study, and a Pilot Program Implementation Committee developed a research plan for the study.

Involving nurses in decisions that affect the organization and its staffing has been shown to be a way to improve nurse satisfaction and retention. However, the extent to which nurses in Colorado are involved in formal and informal structures for decision making is unknown. It is also unclear how nurse involvement impacts the work environment, organizational function, or patient outcomes.

The purpose of this study is to generate knowledge about what nurses think about their current level of involvement in decisions about patient care, the work environment, and planning for staffing. The study will describe the existing status of nurse involvement in 10 Colorado hospitals and analyze the data to look for trends and insights to be used in future research. Associations between perceptions of involvement and organizational outcomes will be determined. The focus of this study is on nurses who provide direct care at the unit level and nurses at the hospital level.

A mixed method will be used for this study in light of the exploratory nature of the initial research questions. Qualitative methods, or methods designed to elicit the perceptions of staff nurses, will be applied to determine how nurses define involvement, how they want to be involved in decisions affecting their patients and their work, and their perception of the value of involvement. Conclusions from the qualitative phase will be used to inform a quantitative analysis. The quantitative phase will measure nurses' and nurse leaders' perceptions of the processes of involvement in Colorado hospitals. These measures will be analyzed for association and correlation with various measures of hospital effectiveness, patient outcomes, and satisfaction on the part of both nurses and their patients.

The qualitative phase is anticipated to take six months to complete and the quantitative phase 12 months. Results of the study will be shared with a broad audience of stakeholders who are interested in nurse retention, quality patient care, and hospital operations.

This research is ground-breaking in that there are no identified national studies underway that focus on the relationship of nurse involvement and a broad range of outcomes. Colorado has the opportunity to be a national leader in investigating and documenting the value of nurse involvement. The outcome of this study can affect patient care processes, nurse satisfaction and retention, and the ways in which organizations solicit and use involvement of the practitioners that provide care to patients.

Senate Bill 08-188

Pilot Program Implementation Committee Research Plan: The Value of Nurse Involvement in Decision Making

Introduction

In 2007, Governor Bill Ritter empowered a task force to study nurse staffing issues and workforce retention in Colorado. The Task Force generated a set of recommendations that were submitted to the Colorado Legislature. One of the recommendations focused on the need for a research study to measure the impact of staff nurse involvement in decisions affecting organizational process and nurse staffing. Senator Betty Boyd sponsored Senate Bill 08-188 to empower and fund such a study. The Senate Bill provided initial administrative funding to the Colorado Center for Nursing Excellence, who convened a Pilot Program Implementation Committee to plan and oversee a study of the meaning and value of nurse involvement. The committee met over a six month period with a research nurse consultant (Dr. Janet Houser, Regis University) to plan the study, which is described here.

The plan calls for a mixed method study, with a qualitative phase intended to describe the meaning, definition, perceived value, and processes for nurse involvement in decisions. The qualitative findings will be used to inform instrumentation for a quantitative study that will describe and compare involvement mechanisms in Colorado hospitals, and measure the association of involvement with specific hospital outcomes.

Problem Statement

Involving nurses in decisions that affect the organization and its staffing has been demonstrated to be a way to improve the satisfaction and retention of nurses. The extent to which nurses in Colorado are involved in formal and informal structures for decision making is unknown. Indeed, little is known about how nurses define involvement or how they desire to be involved. There is potential to improve satisfaction and retention of nurses in Colorado hospitals by encouraging systems for involving nurses in decisions that affect their patients and their work. Yet there is little known about the ways in which nurses should be involved to gain the greatest return for both nurses and their employers. The effects of involvement on organizational and patient outcomes are unclear, and both are important considerations in designing optimal systems for nurse involvement.

Purpose of the Study

The purpose of this study is to generate knowledge about what nurses think about their current level of involvement in decisions about patient care, the work environment, and planning for staffing. The study will describe the existing status of nurse involvement in 10 Colorado hospitals and analyze the data to look for trends and insights to be used in future research. Associations between perceptions of involvement and organizational outcomes will be determined. The focus of this study is on nurses who provide direct care at the unit level and nurses at the hospital level.

Due to constraints in time and resources, this research will not determine cause and effects between what nurses think and specific outcomes, but will describe associations between the two. These are important questions that will need to be answered by a subsequent study that builds on this pilot project.

Previous Research

There is a good deal of research support for the relationship between nursing staff involvement in decisions and their satisfaction with the work environment (Belcher, 1998; Brooks, 1998; Cotton, 1998; Laschinger, 2001; Manojlovich, 2002; Upenieks, 2000). The bulk of this evidence was produced by research designs that make it difficult to draw generalizable conclusions, and much of it is a decade old. Most of these studies were pre- / post- implementation designs that focused on a single institution. As a result, most had limited internal and external validity.

Despite the limitations of the individual studies, their aggregation demonstrates little doubt that involvement and satisfaction are associated. Less compelling evidence supports the relationship between involvement and nurse retention (Janey, 2001) financial performance (DeBaca, 1993) productivity (Valentine, 2008) or patient outcomes (Scott, 1999, Laschinger, 1997)

Virtually all of these studies appraised the effects of formal organizational structures for involvement, e.g. shared governance councils or professional practice guidance groups. No studies were identified that measured the effects of informal involvement methods; even fewer focused on the types of decisions that are most effectively made by nurses. Weston (2008) articulated both the kinds and types of decisions that may involve nurses. The planning group identified a model that expanded on Weston's work by adding the degree of autonomy the nurse has in making decisions, and the importance of feedback loops. The task force developed the model in Figure 1 to guide the concepts to be addressed with this study: the types of decisions in which nurses are involved; the phases of decision making; the amount of autonomy in the decision making process; and feedback loops about involvement.

Decision making for nurses is a process that involves a variety of phases. It also has diverse meanings for nurses. It has been noted that some nurses prefer more involvement in decision making as it relates to their working environment; others have little interest or motivation to get involved (Mangold, et al. 2006). Some researchers have found that if nurses perceive that they are self-managed (e.g. staffing, patient assignments, etc), there is improvement in the work process, work satisfaction and retention (Gould, 2006). Still the question remains, what do nurses perceive their role to be in the decision making process and how much involvement do they really want?

Throughout the literature, there is discussion about whether all nurses have the same preferences for decision making to promote autonomy. The unanswered questions that remain include the ways in which nurses define involvement, and the extent to which they want to be involved in decisions; whether formal or informal structures are effective in providing opportunities for involvement; and the relationship between involvement and organizational outcomes. This study begins a process of inquiry to address these questions.

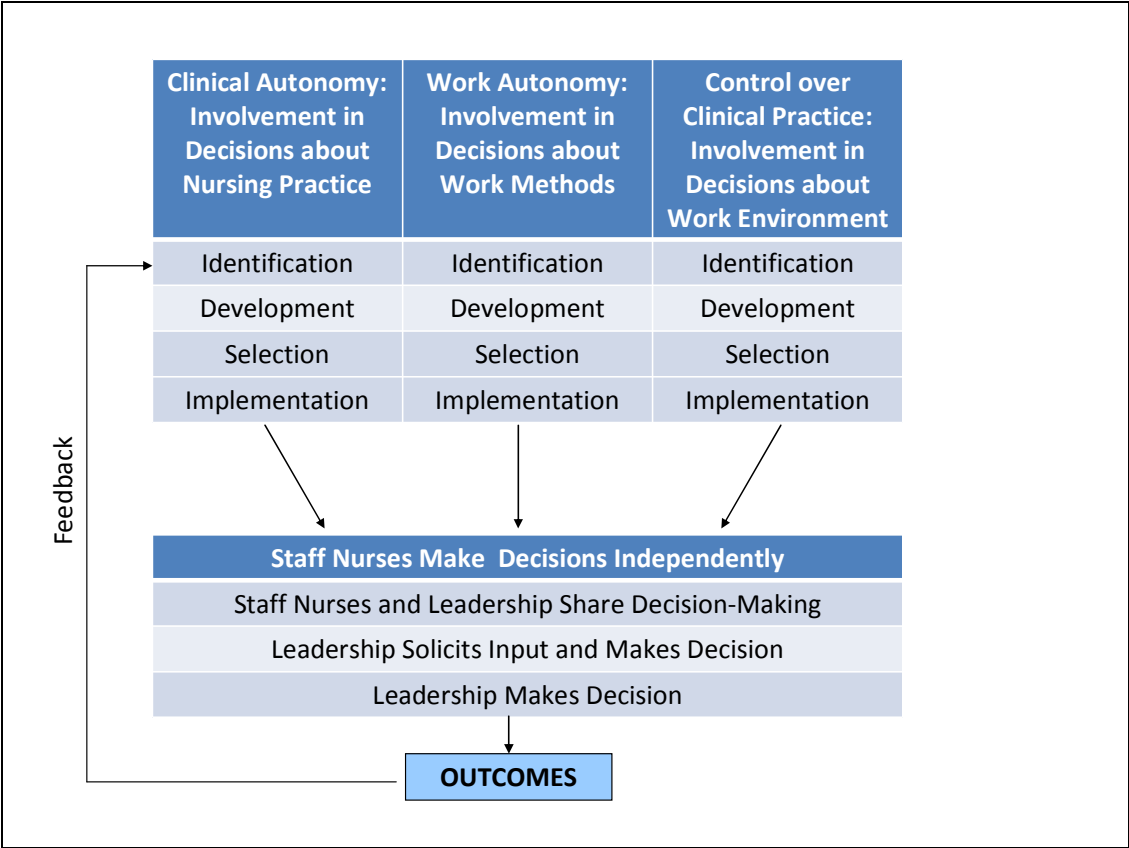


Figure 1: Models of Staff Nurse Involvement in Decision Making

This study has as its aims:

Aim 1: To determine what involvement in decision-making means to nurses.

Aim 2: Describe how direct care nurses want to be involved in decisions regarding patient care, planning for staffing, and the work environment.

Aim 3: To evaluate existing models of nurse involvement in Colorado.

Aim 4: To appraise the evidence supporting the effectiveness and value of current models of nurse involvement in Colorado.

The research questions that will be answered with this study are:

1. What are existing models of nurse involvement?
2. What do nurses define as involvement?
3. How do nurses want to be involved in decision making?
4. In acute care hospital units, what is the association between nurse involvement in decision making and specified outcomes, including effectiveness?
5. How are acute care hospital units that have formal methods for nurse involvement different from units that have informal methods with respect to specified outcomes?
6. How are acute care hospital units that solicit individual nurse involvement different from units that have group methods for involvement with respect to specified outcomes?

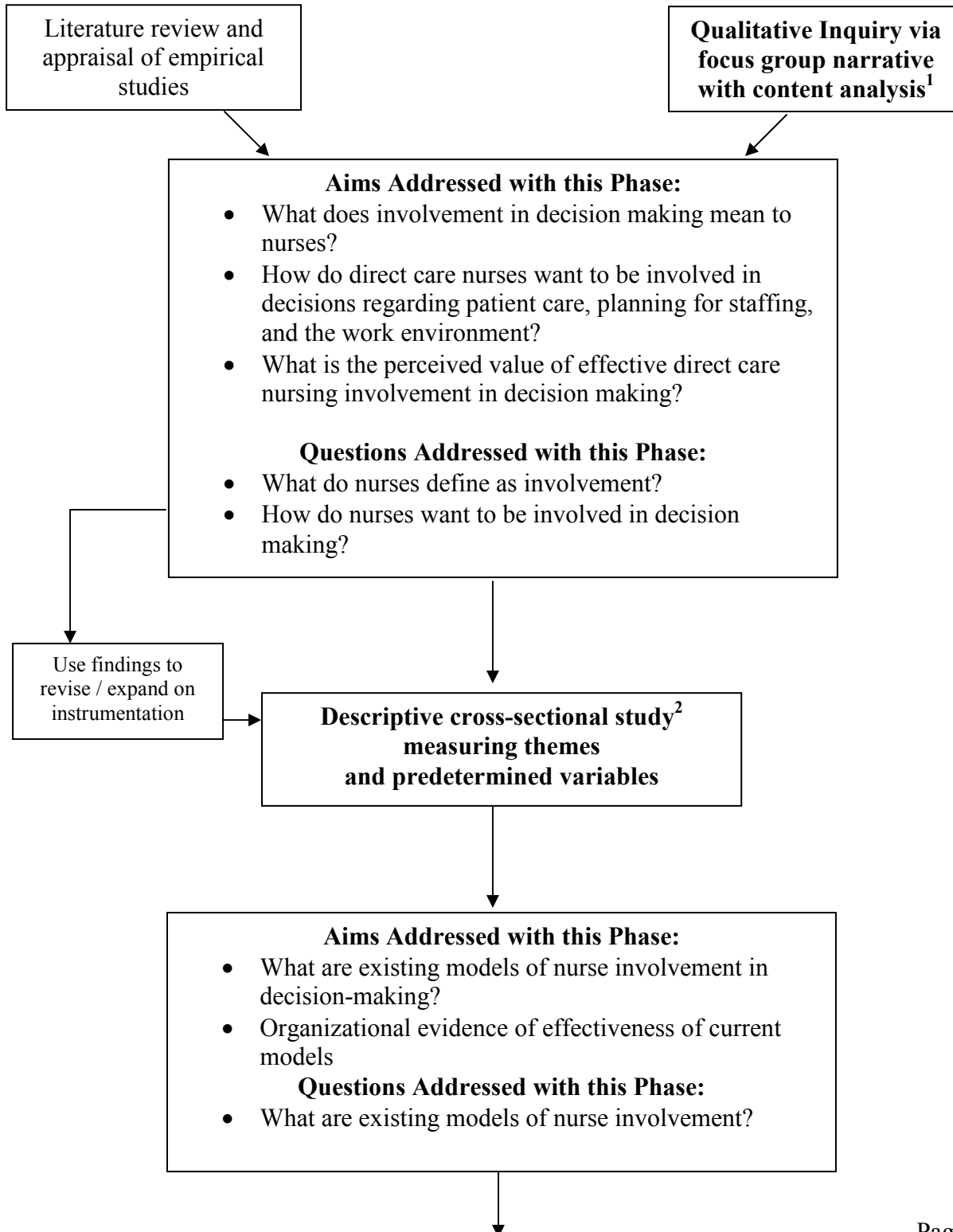
Research Model

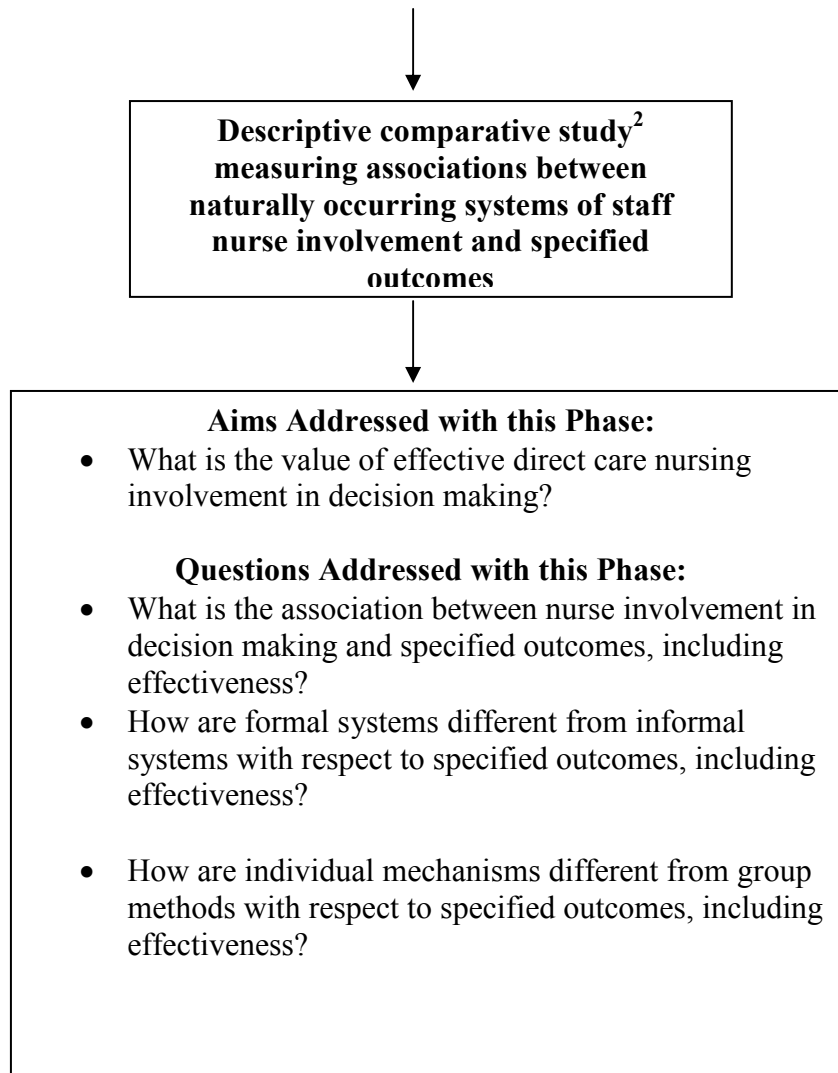
The conceptual basis of this research is a systems framework in which the context of nurses' work involves structures, processes and outcomes. Structures can include formal and informal models of involvement. Processes of involvement include the ways that nurses are involved in decisions, as well as the level of autonomy that nurses have in decision making. Outcomes of decisions made by nurses are related to patient outcomes, work methods, and organizational effectiveness. The conceptual model is depicted as a figure in Appendix A.

Research Approach

The study design is depicted in Figure 2. A table that depicts each Aim, Question, its associated measures and outcomes, and a timeline appears in Appendix B.

Figure 2: A model of the mixed method study plan





¹Qualitative study implemented first, generating themes for subsequent description and testing

² Cross-sectional and descriptive-comparative studies will occur simultaneously

Note: Prior to data collection, application for Institutional Review Board (IRB) approval will be made at Regis University and at each sample facility's IRB. A separate IRB will be submitted for the qualitative and the quantitative studies. Facilities without an IRB may waive to Regis approval or identify an IRB of their choosing.

Methodology Section

The Qualitative Plan

The qualitative phase of a mixed method research study is designed to elicit perceptual data about social phenomena. By using a systematic approach to the analysis of information generated directly from informants – in this case, the staff nurse – themes can be generated that describe the meaning of an experience.

Little data exist about how staff nurses define involvement in organizational decisions or how much they want to be involved. While formal organizational structures have a good deal of evidence to support appropriate structure and process, very little exists regarding informal organizational structures.

The qualitative phase of this study is intended to ask questions that can only be answered directly by staff nurses and their leaders. A general content analysis approach will be used. The outcomes of this phase will be used to describe the current state of involvement in the words of nurses. In addition, the data will be used to inform and expand on the measures and instrumentation used in the quantitative study.

The questions to be addressed by the qualitative study include:

- What does involvement in decision making mean to nurses?
- How do direct care nurses want to be involved in decisions regarding patient care, planning for staffing, and the work environment?
- What is the perceived value of effective direct care nursing involvement in decision making?
- What do nurses define as involvement?
- How do nurses want to be involved in decision making?

Sampling strategy

A theoretical sampling method will be used to identify the sampling frame for the study. A list of all hospitals meeting the inclusion criteria will be generated from the Colorado Department of Public Health and Environment. The inclusion criteria are:

Any acute care hospital in the state of Colorado that admits and treats inpatients (as defined as patients that stay more than 24 hours.)

A stratified random sample of hospitals will be selected using bed size and geographic region as stratification. Geographic region is defined as four quadrants; the quadrants will be identified by using the natural geographic divisions of the Continental and Palmer divides. The Denver metropolitan area will be a single region, defined as any hospital contained within the E-470 circle.

Ten hospitals will be selected for initial contact. Final sample size will be determined by achievement of saturation as determined by consensus of the primary investigator and research

implementation team leader. Initial contact will be made by a member of the research implementation team. Content of the initial contact will be scripted. The script will specifically include initial statements of the purpose and background and what will be expected of participating sites. Talking points will be devised for local managers and staff nurses to use in response to frequently asked questions.

Initial contact will be made with the office of the Chief Nursing Officer (CNO), who will be asked to identify the appropriate organizational contact as facilitator of the research process. If the initial recruitment call is successful in generating interest, a site visit will be scheduled.

Purposive sampling will be used to identify focus group informants. A diverse group of nurses is desired with respect to amount of involvement in organizational decision making. Nurses should represent the spectrum of involvement in decision making, and so nurses will be recruited that:

1. Are actively involved in decision making structures and processes in the organization
2. Are neutral or do not get involved in organizational decisions
3. Actively avoid involvement in organizational decisions

The CNO will be asked for the name of staff nurses that are effectively involved in organizational decision-making. These nurses will serve as contacts to generate a network sample of subjects that are characteristic of groups 2 and 3. Contact will be made with the staff nurses by a member of the implementation team using talking points devised by the planning task force. In addition, posters will be placed in the organization in sites frequented by staff nurses inviting their participation. There are no limitations on which staff nurses can participate in the focus groups.

The Site Visit

The site visit is intended to provide the site with an additional level of detail about the study and expectations of subjects. Site visits will be made by the Leader of the Implementation Team and the Primary Investigator. During the site visit, researchers will:

- Meet with the Chief Nursing Officer and his/her designee
- Conduct open informational staff meetings for staff nurses and other interested employees
- Meet with staff nurses identified by the CNO to initiate recruitment of network sample
- Take care of site logistics (contacts for room reservations, etc)
- Finalize participant thank you gifts
- Arrange for observation of a shared governance council meeting
 - Shared governance is defined as a formal organizational structure for staff nurse involvement in unit or organizational decisions. A mix of hospital-wide and unit-based meetings will be observed
- Arrange for review of shared governance documentation
- Conduct the CNO interview

The interview guide for the CNO appears in Appendix C.

- If the hospital agrees to participate in the study, an organizational letter of support will be solicited and a local contact person will be identified. Promotional posters for internal distribution and talking points for managers will subsequently be sent to the local contact for hospital-wide distribution.
- If the hospital does not agree to participate in the study, an open focus group will be advertised and conducted in a conference-room setting in the community. Advertisement will include purchasing an advertisement in the most widely distributed regional publication as well as posting flyers in local settings.

Site Preparation for Data Collection

Site preparation will be through the Center for Nursing Excellence. This includes:

- meeting room reservations
- local informational and promotional materials
- contact with media (if necessary) for advertising
- travel arrangements for researchers
- recording equipment arrangements.

Data Collection

Data will be collected from four sources at each hospital site:

- Chief Nursing Officer individual interview
- Staff nurse focus groups (with observation)
- Observation of structured organizational and unit-based meetings for staff nurse involvement
- Review of documentation of proceedings of organizational and unit-based meetings for staff nurse involvement

Informed consent will be obtained from nurses attending open focus groups. Proceedings will be audiotaped in their entirety. Subjects will be cautioned not to mention or use other nurses' names during the focus group. No efforts will be made to identify subjects who attend the focus groups. Participants will be asked to write their specialty unit on a piece of paper and deposit it in a container prior to beginning the focus group.

The implementation team leader will facilitate the focus groups using the interview guide that appears in Appendix D. The primary investigator will serve as an observer and record field notes.

Meeting proceeds will be transcribed verbatim in their entirety.

Data Analysis

Data will be analyzed continuously using the constant-comparison method. Potential coding will be initiated when the first transcript is available and initial themes identified. As transcripts become available, each will be compared to previous themes. Revisions will be ongoing. Data collection and review will continue until the Primary Investigator and the Implementation Team Leader agree that saturation has been achieved. Additional scheduled focus groups will be conducted after saturation for the purposes of clarification of themes, member checking, and expansion on previous themes.

If saturation is not achieved after data have been collected from all sites, recruitment of additional sites will be initiated using the procedure identified here.

An external coder will be recruited to establish inter-coder reliability after the code book is complete and at least two transcripts have been coded. Inter-coder reliability will be considered adequate if simple percent agreement reaches 85% and Cohen's Kappa reaches 80% with alpha of .05.

If acceptable reliability is not achieved, the code book will be revised using code-level diagnostics from the Cohen's Kappa analysis. Inter-coder reliability and appropriate revision of the code book will continue until a priori levels of agreement are reached.

Strategies to Enhance Trustworthiness

The qualitative phase of the study will use multiple strategies to assure the rigor and credibility of the qualitative findings, including:

- Initial bracketing of bias by the primary investigator and implementation team leader
- Theoretical sampling
- Use of saturation standard for sample size
- Reports of findings in respondents words
- Triangulation of findings from leaders, staff nurses, observation of meetings, and review of meeting proceedings
- Purposeful sampling strategy
- Member checking of initial themes with subsequent focus groups
- Establishment of inter-coder reliability
- Team determination of conclusions and recommendations

Results and Conclusions

Results of the qualitative study will be reported to the Pilot Project Implementation Committee for review and discussion. The Pilot Project Implementation Committee will determine the conclusions, implications, and recommendations based on the results reported by the researchers.

In addition, the qualitative conclusions will be used to revise, enhance, and expand questions used in instrumentation in the quantitative study.

A formal communication plan for findings will be developed by a subgroup of the Pilot Project Implementation Committee, and will be initiated after the qualitative phase of the study is complete. The reporting plan will specifically include a report to all participating facilities and to the original Governor's Task Force on Nurse Work Force and Patient Care.

The Quantitative Plan

The quantitative phase of a mixed method research study is intended to confirm relationships between involvement in decision making and specific outcomes. Quantitative methods are used to establish the strength and direction of these relationships and to quantify causal effects. By using a rigorous approach to the collection and analysis of quantitative data about the nursing work environment, evidence can be produced that can motivate appropriate organizational action.

The questions to be addressed by the quantitative study include:

- What are existing models of nurse involvement in decision-making?
- What is the perceived value of effective direct care nursing involvement in decision making?
- What is the association between nurse involvement in decision making and specified outcomes, including effectiveness?
- How are formal systems different from informal systems with respect to specified outcomes, including effectiveness?
- How are individual mechanisms different from group methods with respect to specified outcomes, including effectiveness?

The planning model of decisional involvement represented earlier in Figure 1 guided the development of an instrument blueprint, which was used as a framework for development of the quantitative research plan, and as a basis for instrument evaluation. The test blueprint appears in Appendix E.

Use of Qualitative Findings to Inform Instrumentation

A search for measurement instruments that possessed appropriate psychometric qualities and addressed each cell in the test blueprint revealed 9 instruments for task force evaluation. After group review, the planning group determined that no single instrument possessed all the desired attributes. Three instruments were determined to measures many of the concepts in the blueprint, and permission to reprint the instruments was sought. These instruments are:

Blegen, M.: The Decision Making Autonomy Survey
Hess, R.: The Index of Professional Nursing Governance
Havens, D.: The Staff Nurse Decisional Involvement Scale

The Hess instrument measures organizational aspects of a formal governance structures. The Blegen and Havens instruments both measures perceptions of involvement at the staff nurse

level. The Havens instrument further enables staff nurses to identify the level of involvement they desire when compared the amount of involvement they perceive they currently have.

The quantitative phase will actually begin at the completion of the qualitative study. The themes will be used to develop additional questions for survey of nursing staff that address gaps in the test blueprint. The qualitative phase will inform additional instrument item development.

Dr. Mary Blegen, (1993) author of the “Decision Making Autonomy Survey,” has given the committee permission to use and revise her instrument. Additional items derived from the qualitative conclusions will be added to her instrument and the revised instrument will be pilot tested for psychometric acceptability. This process must occur before the quantitative study can proceed, as IRB groups will require final instrumentation as part of the application process. A subgroup of the Pilot Program Implementation Committee will develop the additional survey questions.

Reliability of the additional items will be tested with Cronbach’s alpha analysis with item level diagnostics. Content validity will be tested via confirmation of content with the test blueprint from a panel of content experts. Construct validity will be established with principal component analysis of the instrument. Results will be used to make final revisions to the instrument.

Research Design

This study is a descriptive-comparative correlation research design.

Sampling Strategy

A random sampling method will be used to identify the sampling frame for the study. A list of all hospitals meeting the inclusion criteria will be generated from the Colorado Department of Public Health and Environment. The inclusion criteria are:

Any acute care hospital in the state of Colorado that admits and treats inpatients (patients that stay more than 24 hours.)

A stratified random sample will be selected using bed size and geographic region as stratification. Geographic region is defined as four quadrants and Denver metropolitan area in the same manner as the qualitative sample. Simple random sampling will be used to select the final sampling frame.

Fifteen hospitals will be selected for initial contact. Final sample size will be determined by power analysis based on pilot data. The unit of analysis is a patient care unit, nested within the hospital sample. Eligible units are those that care for patients overnight, and will be classified as: critical care; medical/surgical; maternal/child; behavioral health; and subacute. No more than four units from any one facility will be asked to participate. Units will be randomly selected and compared to an a priori sampling plan for optimal distribution of type of care units. It cannot be assumed that hospitals in the quantitative phase will or will not have participated in the qualitative study.

Initial contact will be made by a member of the research implementation team, and content of the contact will be scripted. The script will specifically include initial statements of the purpose and background and what will be expected of participating sites. Talking points will be devised for frequently asked questions

Initial contact will be made with the office of the Chief Nursing Officer (CNO), who will be asked to identify the appropriate organizational contact. If the initial recruitment call is successful in generating interest, a site visit will be scheduled.

The Site Visit

The site visit is intended to provide the site with an additional level of detail about the study and expectations of subjects. Site visits will be made by the Leader of the Implementation Team and the Primary Investigator. During the site visit, researchers will:

- Meet with the Chief Nursing Officer and his/her designee
 - Conduct open informational staff meetings for staff nurses and other interested employees
 - Take care of site logistics (contacts for room reservations, etc)
 - Finalize site compensation
 - Arrange to meet with organizational contacts that generate requested data (quality department, human resources, infection control, patient safety, health information systems, as appropriate)
- If the hospital agrees to participate in the study, an organizational letter of support will be solicited and a local contact person will be identified. Promotional posters for internal distribution and talking points for managers will subsequently be sent to the local contact for hospital-wide distribution.

Site Preparation for Data Collection

Site preparation will be through the Center for Nursing Excellence. This includes:

- local informational and promotional materials
- travel arrangements for researchers

Data Collection

Data will be collected by trained data collectors. Data collectors will be recruited from local and regional universities. The ideal data collector is a nurse who is a graduate student in a Masters' in nursing or Doctoral program with experience in research and/or data collection. Data collectors will be trained by the implementation team and will be checked for reliability prior to site visits. A data collector cannot be employed in a subject facility within their geographic region.

Four units will be randomly selected from all eligible organizational patient care units. Eligible units include those that admit patients for overnight stays for acute inpatient nursing care.

Informed consent will be obtained from all nurses participating in the study, including nurse leaders and the CNO. The CNO and nurse leaders will be asked to complete the “Index of Professional Nursing Governance,” by Robert Hess (1998.) Staff nurses will be asked to complete the Hess instrument as well as the “Decisional Involvement Scale” by Havens (2005) and the “Decisional Making Autonomy Survey” by Blegen (1993.)

A conference room will be reserved in which staff can complete the surveys away from the work unit. An automated survey instrument will be used with wireless access to an internet-based data repository for data collection. The conference room will be set up with multiple laptop computers available for staff nurses and leaders to complete instrumentation. Eligible nurses who are unable to come to the conference room will be given a card with a URL directing them to the data collection instruments.

Organizational data will be collected from the appropriate secondary data and recorded in the data repository by onsite data collectors. Data will be collected in aggregate, de-identified form. Operational definitions of all variables will be developed by the implementation team and reviewed by the planning task force. Whenever possible, data will be collected using operational definitions from the National Database of Nursing Quality Indicators, the Health Care CAPS dataset, or the Healthcare Utilization Project. Variables for data collection appear in Appendix F.

Data Analysis

Data will be appropriately summarized for descriptive analysis. Descriptive variables and instrument scores will be used to address questions about existing models of involvement, and to characterize the respondents.

Assumptions of statistical tests will be evaluated. Categorical and classification variables will be analyzed with tests of association (Chi Square.) Interval and continuous variables will be tested for relationships with Pearson’s or Spearman’s correlation analysis, analysis of variance, and regression analysis.

Specifically, scores on instrumentation will enable the development of an “Involvement” factor that can be divided into levels of high, moderate, and low involvement. These factor levels will be used to compare high involvement organizations with low involvement organizations on outcome variables using analyses of variance. Likewise, instrument scores will enable the development of “formal/informal” involvement factor, enabling the examination of differences in organizations that formalize nurse input. Regression analysis will be used to describe the explanatory capacity of involvement and various descriptive characteristics on outcome variables.

A priori alpha is established at .05. Confidence intervals will be calculated and appropriate measures of effect size reported.

Results and Conclusions

Results of the quantitative study will be reported to the Planning Task Force for review and discussion. The Task Force will determine the conclusions, implications, and recommendations based on the results reported by the researchers.

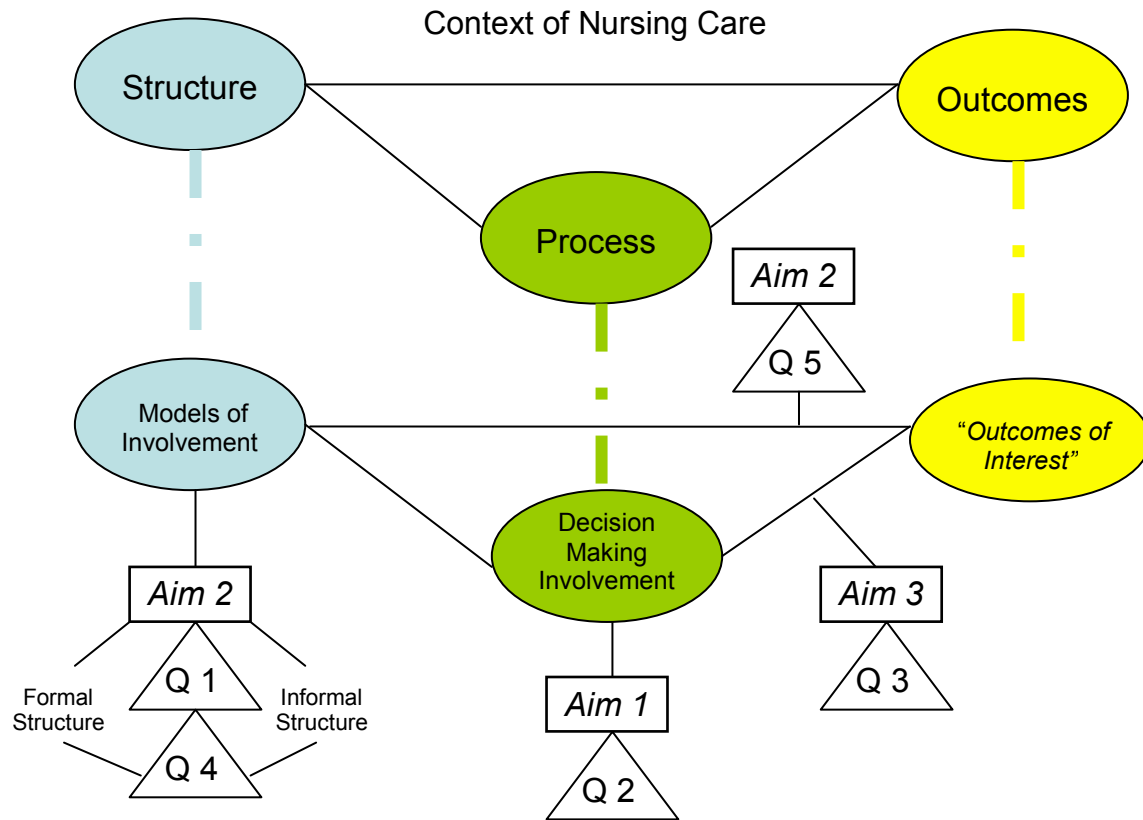
A formal communication plan for findings will be developed by a subgroup of the Planning Task Force, and will be initiated after the entire study is complete. The reporting plan will specifically include a report to all participating facilities and to the original staffing task force.

Reference List

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APPENDIX A: The conceptual model for the study



Brewer, B., Verran, J., & Stichler, J. (2008) The systems research organizing model: A conceptual perspective for facilities design. *Health Environments Research and Design Journal*. 1(4):7-19.

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APPENDIX B: Phases of the Research with Timeline for Completion

Research Phase	Action	Process	Outcome	Timeline
Phase I	Select Sample	Stratified random sample	n/a	March, 2009
	Institutional Review Board Application		IRB approval	March 2009
	Recruitment telephone contact	Scripted contact	n/a	March, 2009
	Site Visit	Detailed orientation to the project Chief Nursing Officer Interview Identification of Site Contact	CNO interview	April, 2009
	Focus Groups	Organizational or community-based	Focus group interviews	May / June 2009
	Data Analysis	Constant comparison Determination of inter-coder reliability	Themes generated	July / August 2009
	Discussion / conclusions / recommendations	PPIC discussion	Conclusions	August, 2009
Phase II	Develop additional instrumentation questions based on qualitative study	Test for reliability / validity	Final instrumentation	September, 2009
	Institutional Review Board Application		IRB approval	
	Select Sample	Stratified random sample	n/a	September, 2009
	Recruitment telephone contact	Scripted contact	Letter of Intent	October, 2009
	Site Visit	Detailed orientation to the project Chief Nursing Officer Interview		October / November 2009

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		Identification of Site Contact		
	Data collector training	Train and test for inter-rater reliability	Reliable data collectors	November / December 2009
	Data collection onsite	Leadership: Hess instrumentation Staff nurses: Hess, Havens, Blegen instruments Descriptive variables: nurse level, unit level, and organizational level Research variables: Outcome variables (See Appendix F)	Reliable data	January through March 2010
	Data aggregation and analysis		Results	March through May 2010
	Discussion / conclusions / recommendations	PPIC discussion	Conclusions	August, 2010

APPENDIX C: Interview Guide for Chief Nursing Officer, Qualitative Phase

1. How would you define staff nurses involvement in decisions about nursing practice, work methods, or work environment?
2. How much staff nurse involvement would you like to have in decisions about nursing practice, work methods, or work environment?
3. How much do you involve staff nurses in each stage of decision making, including:
 - Identification of issues
 - Development of solutions
 - Selecting solutions
 - Implementing solutions
4. How do you communicate outcomes of staff nurse involvement back to them?
5. How do you hold staff nurses accountable for decisions they've participated in?
6. How much autonomy do you believe staff nurses have in the decision making process?
7. What do you value about involving staff nurses in decisions?
8. Please identify staff nurses in your organization who are highly involved in decisions about clinical practice, the unit work methods, and/or the organization.
9. Why did you select these individuals?
10. What do you value about their involvement?

APPENDIX D: Interview Guide For Focus Groups, Qualitative Phase

1. How would you define involvement in decisions about nursing practice, work methods, and work environment?
2. How much involvement would you like to have in decisions about nursing practice, work methods, and work environment?
3. How much are you involved in each stage of decision making, including:
 - Identification of issues
 - Development of solutions
 - Selecting solutions
 - Implementing solutions
4. How do you hear about the outcomes of your involvement?
5. How are you held accountable for decisions you've participated in?
6. How much autonomy do you have in the decision making process?
7. What do you value about being involved in decisions?

APPENDIX E: Instrumentation Test Blueprint

Conceptual Element	Critical Content	Critical Content	Critical Content	Critical Content
Types of decisions made through staff nurse involvement	Decisions about nursing practice (focused on patients)	Decisions about work methods (focused on the unit)	Decisions about work environment (focused on the organization)	Decisions about planning for staffing
Structures and processes for involvement	Formal and informal structures	Functionality of structures	Organizational alignment	Nursing leadership alignment
Phases of involvement in decisions	Identification / development / selection of issues	Implementation of proposed actions	Empowerment to act and/or access to power and influence	
Outcomes/ and Feedback	Processes for accountability for outcomes	Evaluation of efficacy and value of outcome	Feedback structures for staff	Level of engagement in overall process

APPENDIX F: Variables for Data Collection

Descriptive/Demographic variables for data collection

Nurse Level Descriptive Variables:

Age in years

Gender

Years employed:

On this unit

In this organization

In this specialty

Year passed the State Board Examination / NCLEX: _____

Ethnicity: Federal standard

Is English your primary language? ____ yes ____ no

Full time / part time / agency / traveler / per diem

Highest degree obtained

Certifications: list

Job title: list

Unit Level Descriptive Variables:

Clinical Specialty :

Mental Health ____ Medical/Surgical ____ Maternal/Child ____ Critical Care ____

Subacute ____ Other: Specify _____

Bed count (capacity) _____

Unit Leader Title: _____

Position reports to _____

Dedicated manager or multiple units?

Span of control: Number of direct reports

Average daily admissions / discharges / transfers

Staffing ratio: Nurse to patient ratio per staffing matrix

Nursing students: yes ____ no ____

% of staff with less than 1 year experience

Advance practice support positions available to the unit

Administrative support positions %

Clerical Number per unit %

Secretarial Number per unit %

Hours per patient day as reported to NDNQI:

Percent and number of total patient care staff; RN staff; LPN staff; Unlicensed Assistive

Personnel Staff; and Agency/Traveler/Temporary Staff

Unit level structures for involvement: Describe

Hospital Level Descriptive Variables:

For profit / Not for profit status
Academic / Non academic status
Specialty / General patients
Bed count:
 Licensed / staffed
 Average daily census
Case mix index: CMS definition
Organizational chart: Copy of the org chart
Rapid response team: Yes/no
Magnet / Non-Magnet
Organizational structures for involvement: Describe

Research Variables:

Scores on the:
Staff Nurse Decisional Involvement Scale
Staff Nurse Autonomy Survey
Index of Professional Nursing Governance

Outcome Variables:

From the National Database for Nursing Quality Indicator set (NDNQI):

Hours per patient day
Practice environment scale
Job satisfaction scale

From HCAPS:

Patient satisfaction

Quality of Care:

Infections
Ventilator associated pneumonia
Patient falls
Pressure ulcers
Pain assessment cycle
Failure to rescue
Patient and family complaints

Turnover / Staff stability:

Turnover rate
Wastage rate
Accession rate
Intent to leave